

Alliant Energy

CASE
SUMMARY

3



ALLIANT ENERGY

Madison, Wisconsin and Clinton, Iowa
Dane County / Clinton County

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The Company

Alliant Energy provides electric, natural gas, water, and steam services to more than 1.2 million customers in Iowa, Illinois, Minnesota and Wisconsin.

Project Background

This project was aimed at the control and reduction of nitrogen oxide (NOx) and other combustion byproducts. This was achieved by balancing coal flow in pipes and adjusting secondary air around the coal and primary airflows.

Incentives to Change

Alliant Energy is committed to promoting a clean, safe, and healthy environment. Caring for the environment is one of the company's core values and Alliant will do whatever possible to continually improve environmental performance.

Results

From coal flow measurement data it was found that significant deviations in coal flows in pipes exists. However, primary airflow deviations in pipes were not significant. Primary air to coal ratios significantly fluctuated. Particle size distribution indicated good trends of fineness.

Balancing coal flow in pipes by correcting stoichiometric ratios and adjusting secondary air around the coal flow will result in NOx reduction.



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